

IN THE CLAIMS

1. (Currently Amended) An image display apparatus, comprising:

an image processor for outputting image data including plural color component data,
wherein the plural color component data includes red, blue, and green color component data;

a gain corrector for correcting chromaticity levels of the image data output by the
image processor; and

an image display device having pixels each emitting a plurality of colored light rays
for forming a color image in accordance with the corrected image data corrected by the gain
corrector, wherein

the gain corrector corrects a respective level of the red and blue ~~at least one of the~~
~~plural~~ color component data applied to each respective pixel in the image display device
based on measured luminance levels at each respective pixel such that, when image data
representing an image of a uniform color are output from the image processor, a difference in
chromaticity of light exiting from the pixels due to characteristic differences between the
pixels of the image display device is reduced without making uniform a luminance of the
light exiting from the pixels of the image display device; and

the gain corrector is configured to use the measured luminance level of green at each
pixel as a reference level to reduce the difference in the chromaticity at each pixel.

2. (Previously Presented) An image display apparatus according to claim 1, wherein
the gain corrector corrects the chromaticity levels of all but a specific one of the plural color
component data applied to the pixels to reduce the difference in level between the specific
color component data and the other color component data.

3. (Previously Presented) An image display apparatus according to claim 2, wherein the specific color component data is a color component data that makes a greatest contribution to the luminance of the light for forming the image.

4. (Previously Presented) An image display apparatus according to claim 3, wherein the plural color component data are red, green, and blue component data, and the specific color component data is the green component data.

5-6. (Cancelled)

7. (Currently Amended) An image display method, comprising:
providing image data including plural color component data, wherein the plural color component data includes red, blue, and green color component data;

correcting chromaticity levels of the image data; and

producing light representing an image at pixels of an image display device, each pixel emitting a plurality of colored light rays for forming a color image in accordance with the corrected image data, wherein

the correcting step comprises correcting a respective level of the red and blue ~~at least one of the plural~~ color component data applied to each respective pixel in the image display device based on measured luminance levels at each respective pixel such that, when image data representing an image of a uniform color are output from the image processor, a difference in a chromaticity of light exiting from the pixels due to characteristic differences between the pixels of the image display device is reduced without making uniform a luminance of the light exiting from the pixels of the image display device; and

the correcting step comprises using the measured luminance level of green at each pixel as a reference level to reduce the difference in the chromaticity at each pixel.

8. (Original) An image display method according to claim 7, wherein the step of correcting the level of at least one of the plural color component data includes the step of correcting the levels of all but a specific one of the plural color component data applied to the pixels to reduce difference in level between the specific color component data and the other color component data.

9. (Previously Presented) An image display method according to claim 8, wherein the specific color component data is a color component data that makes the a greatest contribution to the luminance of the light for forming the image.

10. (Previously Presented) An image display method according to claim 9, wherein the plural color component data are red, green, and blue component data, and the specific color component data is the green component data.

11-12. (Canceled)

13. (Previously Presented) An image display apparatus, comprising:
an image processor for outputting image data including plural color component data;
a gain corrector for correcting chromaticity levels of the image data output by the image processor; and

an image display device having a plurality of pixels from each of which light for forming an image exits in accordance with the corrected image data corrected by the gain corrector, wherein

the gain corrector corrects the chromaticity level of at least one of the plural color component data applied to the plurality of pixels in accordance with respective positions of the plurality of pixels such that, when image data representing an image of a uniform color are output from the image processor, a difference in a chromaticity of light exiting from the plurality of pixels is reduced among the plurality of pixels, without making a luminance of the light exiting from the plurality of pixels of the image display device equal at each of the plurality of pixels;

the plurality of pixels are segmented into a plurality of triangular areas;

correction values for apex pixels corresponding to apexes of the plurality of triangular areas are determined in advance; and

correction values of pixels other than the apex pixels in each of the plurality of triangular areas are interpolated from the correction values of respective apex pixels of each of the plurality of triangular areas.

14. (Previously Presented) An image display apparatus according to claim 13, wherein the gain corrector corrects the chromaticity levels of all but a specific one of the plural color component data applied to the plurality of pixels to reduce the difference in chromaticity level between the specific color component data and the other color component data.

15. (Previously Presented) An image display apparatus according to claim 14, wherein the specific color component data is a color component data that makes a greatest contribution to a luminance of the light for forming the image.

16. (Previously Presented) An image display apparatus according to claim 13, wherein the plurality of pixels are segmented into the plurality of triangular areas by a horizontal axis passing through a center pixel among the plurality of pixels, a vertical axis passing through the center pixel, and sides of a rhombus whose apexes are end points of the horizontal axis and the vertical axis.

17. (Previously Presented) An image display method, comprising:
providing image data including plural color component data;
correcting chromaticity levels of the image data; and
producing light representing an image at a plurality of pixels of an image display device in accordance with the corrected image data, wherein

the correcting step comprises correcting the level of at least one of the plural color component data applied to the plurality of pixels in accordance with respective positions of the plurality of pixels such that, when image data representing an image of a uniform color are output from the image processor, a difference in a chromaticity of light exiting from the plurality of pixels is reduced among the plurality of pixels, without making a luminance of the light exiting from the plurality of pixels of the image display device equal at each of the plurality of pixels;

the plurality of pixels are segmented into a plurality of triangular areas;

correction values for apex pixels corresponding to apexes of the plurality of triangular areas are determined in advance; and

correction values of pixels other than the apex pixels in each of the plurality of triangular areas are interpolated from the correction values of respective apex pixels of each of the plurality of triangular areas.

18. (Previously Presented) An image display method according to claim 17, wherein the step of correcting the level of at least one of the plural color component data comprises:

correcting levels of all but a specific one of the plural color component data applied to the plurality of pixels to reduce the difference in level between the specific color component data and the other color component data.

19. (Previously Presented) An image display method according to claim 18, wherein the specific color component data is a color component data that makes the greatest contribution to a luminance of the light for forming the image.

20. (Previously Presented) An image display method according to claim 17, wherein the plurality of pixels are segmented into the plurality of triangular areas by a horizontal axis passing through a center pixel among the plurality of pixels, a vertical axis passing through the center pixel, and sides of a rhombus whose apexes are end points of the horizontal axis and the vertical axis.

21. (Currently Amended) An image display apparatus, comprising:
an image processor for outputting image data including plural color component data,
wherein the plural color component data includes red, blue, and green color component data;
a gain corrector for correcting chromaticity levels of the image data output by the image processor; and

an image display device having a plurality of pixels each emitting a plurality of colored light rays for forming a color image in accordance with the corrected image data corrected by the gain corrector;

wherein the gain corrector corrects the level of the red and blue ~~at least one of the plural~~ color component data applied to the pixels in accordance with the positions of the pixels such that, when image data representing an image of a uniform color are output from the image processor, a difference in chromaticity of light exiting from the pixels due to characteristic differences between the pixels of the image display device is reduced without making luminance of the light exiting from the pixels of the image display device conform to a desired smooth luminance profile throughout the image display device and without making uniform the luminance of the light exiting from the pixels of the image display device; and the gain corrector is configured to use the measured luminance level of green at each pixel as a reference level to reduce the difference in the chromaticity at each pixel.

22. (Previously Presented) The image display apparatus of claim 21, wherein the gain corrector corrects the chromaticity levels of all but a specific one of the plural color component data applied to the pixels to reduce the difference in level between the specific color component data and the other color component data.

23. (Previously Presented) The image display apparatus of claim 22, wherein the specific color component data is a color component data that makes a greatest contribution to the luminance of the light for forming the image.

24. (Previously Presented) The image display apparatus of claim 23, wherein the plural color component data are red, green, and blue component data, and the specific color component data is the green component data.

25. (Previously Presented) The image display apparatus of claim 21, wherein the plurality of pixels are segmented into a plurality of small areas of polygonal shape;

correction values for apex pixels corresponding to apexes of the small areas are determined in advance; and

correction values of pixels other than the apex pixels in each small area are interpolated from the correction values of the apex pixels of each small area.

26. (Previously Presented) The image display apparatus of claim 25, wherein the plurality of pixels are segmented into the plurality of small areas by a horizontal axis passing through a center pixel among the multiple pixels, a vertical axis passing through the center pixel, and defining the sides of a rhombus whose apexes are the extremities of the horizontal and vertical axis.

27. (Currently Amended) An image display method, comprising:

providing image data including plural color component data, wherein the plural color component data includes red, blue, and green color component data;

correcting chromaticity levels of the image data; and

producing light representing an image at pixels of an image display device, each pixel emitting a plurality of colored light rays for forming a color image in accordance with the corrected image data, wherein

the correcting step comprises correcting the level of the red and blue at least one of the plural color component data applied to the pixels in accordance with respective positions of the pixels such that, when image data representing an image of a uniform color are output from the image processor, a difference in a chromaticity of light exiting from the pixels due to characteristic differences between the pixels of the image display device is reduced without making a luminance of the light exiting from the pixels of the image display device conform to a desired smooth luminance profile throughout the image display device and without making uniform the luminance of the light exiting from the pixels of the image display device; and

the correcting step comprises using the measured luminance level of green at each pixel as a reference level to reduce the difference in the chromaticity at each pixel.

28. (Previously Presented) The image display method of claim 27, wherein the step of correcting the level of at least one of the plural color component data includes the step of correcting the levels of all but a specific one of the plural color component data applied to the pixels to reduce difference in level between the specific color component data and the other color component data.

29. (Previously Presented) The image display method of claim 27, wherein the specific color component data is a color component data that makes the a greatest contribution to the luminance of the light for forming the image.

30. (Previously Presented) The image display method of claim 29, wherein the plural color component data are red, green, and blue component data, and the specific color component data is the green component data.

31. (Previously Presented) The image display method of claim 27, wherein the plurality of pixels are segmented into a plurality of small areas of polygonal shape;

correction values for apex pixels corresponding to apexes of the small areas are determined in advance; and

correction values of pixels other than the apex pixels in each small area are interpolated from the correction values of the apex pixels of each small area.

32. (Previously Presented) The image display method of claim 31, wherein the plurality of pixels are segmented into the plurality of small areas by a horizontal axis passing through a center pixel among the multiple pixels, a vertical axis passing through the center pixel, and defining the sides of a rhombus whose apexes are the extremities of the horizontal axis and the vertical axis.